

Title (en)
THREE-PHASE RECTIFIER

Title (de)
DREIPHASEN-GLEICHRICHTER

Title (fr)
REDRESSEUR TRIPHASÉ

Publication
EP 2448101 A1 20120502 (EN)

Application
EP 10792226 A 20100628

Priority

- JP 2010060976 W 20100628
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Abstract (en)

A three-phase rectifier converts three-phase alternating current (AC) power supplied from a three-phase AC power supply into direct current (DC) power. The three-phase rectifier includes a full-wave rectifier circuit, a bidirectional switch circuit, and a controller. The full-wave rectifier circuit rectifies three-phase AC power to DC power. The bidirectional switch circuit switches on and off inputs of respective phases from the three-phase AC power supply to the full-wave rectifier circuit. The controller detects voltages of the respective phases of the three-phase AC power supply, generates switching patterns for the respective phases to switch the bidirectional switch circuit on and off based on the detected voltages of the phases, and controls switching of the bidirectional switch circuit based on the switching patterns.

IPC 8 full level
H02M 7/12 (2006.01)

CPC (source: EP US)
H02M 1/4216 (2013.01 - EP US); **H02M 7/06** (2013.01 - EP US); **H02M 7/219** (2013.01 - EP US); **H02M 1/0085** (2021.05 - EP);
Y02B 70/10 (2013.01 - EP US)

Cited by
EP2991216A3; US2017366100A1; US10027244B2; CN107431445A; EP3280041A4; US10177572B2

Designated contracting state (EPC)
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DOCDB simple family (publication)

EP 2448101 A1 20120502; EP 2448101 A4 20170913; EP 2448101 B1 20210526; AU 2010263537 A1 20120119; AU 2010263537 B2 20140626;
CN 102598497 A 20120718; CN 102598497 B 20150819; JP 2011030409 A 20110210; JP 4687824 B2 20110525; US 2012106213 A1 20120503;
US 8817505 B2 20140826; WO 2010150909 A1 20101229

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